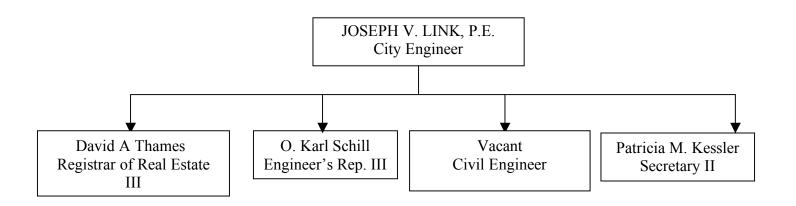
# **CITY OF HARRISBURG**

# DEPARTMENT OF GENERAL GOVERNMENT OFFICE OF THE CITY ENGINEER

# **2008 PERSONNEL DIRECTORY**



EMPLOYEE	POSITION	DATE OF EMPLOYMENT
Joseph. V. Link, P.E.	City Engineer	01/06/92
Vacant	Civil Engineer	
David A. Thames	Registrar of Real Estate III	07/31/95
O. Karl Schill	Engineer's Representative III	11/04/85
Patricia M. Kessler	Secretary II	06/23/80

### OFFICE OF THE CITY ENGINEER

Joseph V. Link, P E City Engineer 2008 ANNUAL REPORT

### **DUTIES AND RESPONSIBILITIES:**

The City Engineer shall perform such duties as shall be prescribed with reference to the construction, reconstruction, maintenance and repair of all streets, pavements, sewers, bridges, culverts, cause proper management of storm drainage and other engineering work. He shall prepare plans, specifications, and estimates for all such work undertaken by the city, and shall, whenever required, furnish council, the committees thereof, the mayor, public boards, or heads of departments, with reports, information or estimates on any city engineering work, or on questions submitted by any of them in their official capacity. The City Engineer shall cause to be made all such necessary books, maps and plans as will show the situation and dimensions of each property therein, which books, maps or plans shall be so prepared as to show the city number, and name of the owner or owners thereof.

**GOALS:** The Mayor established a set of long-term goals for this office beginning in 1994. Current status is reported annually until goal is achieved, then it is dropped from the report.

# • 1994 Development of Streetscape Standards

Formalize standards for construction of "Downtown Area" streetscape including sidewalk construction/renovation, planting trees, street lighting and overhead street name signs.

### **Modification of Goal**

The Mayor expanded the scope of this goal to include the purchase of the City streetlighting system and to replace the "cobra head" light fixtures in the downtown district with modern fixtures manufactured in the "turn of the century" styles. Street light poles will be used to carry traffic signals, parking meters and street name signs.

# Status (1999)

This office published standard construction details for sidewalk construction with granite curb and brick edge and standard concrete curb. A master plan of the downtown streetlight system was developed and is in use. Purchase of the streetlight system is in negotiation and may lead to financing for replacement of streetlights in the Downtown District.

# Status (2000)

This office and the City Bureau of Planning consulted with the Mayor's Millennium Commission, Beautification Subcommittee to prepare a document that catalogued the existing streetscape in the Central Business District and then established standards and materials for the City to adopt for renewals, upgrades and new construction. Materials, products and standards are specified for reconstruction of sidewalks, installation of streetlights, planting of trees and installation of various types of street furniture.

# Status (2001)

On June 4, 2001, the City purchased the streetlight system except for the portion of lighting in the Central Business District. That portion was omitted because additional time was needed to determine how to separate the light fixtures from the underground electrical distribution system in the area and the estimated cost was prohibitive. By the end of the year, the decision was made to pursue purchase of the CBD streetlight system with replacement of the fixtures with historic style lighting.

# Status (2002)

By Agreement dated 11-1-2001, the Commonwealth provided \$3.1 million to the City for design and construction of a Streetscape project to install streetlights and street trees on streets in the Central Business District (CBD) that border or lead to the Capitol Complex or any street that houses a Commonwealth Office. The City selected a lighting consultant and a landscape consultant to design the project and negotiated a scope of work and design price with them. By letter dated April 10, 2004, the Commonwealth approved the City's plan to commence design and construction, and the City issued a Notice To Proceed to its consultants. The full

scope of the project is expected to cost between \$7million and \$8 million, and the City received a commitment from the Department of Transportation to loan the balance of the funding to the City at approximately one-half of the prime interest rate for a ten-year period. Application for the loan will be submitted as soon as the consultants prepare a detailed cost estimate.

During the last year, the City completed construction of two major streetscape projects. The Capitol Heights Housing project in Midtown included new sidewalks, trees & historic style streetlights. New historic style streetlights and trees were installed under the Capitol Corridors project on several main streets in the Midtown and Allison Hill sections of the City. Both projects are detailed later in this report.

# Status (2003)

Options for many component parts of the CBD Streetscape project have been explored and are in current development. Examples include the light fixtures, pole material and design, water features, entry gates into the City, prominent intersections, building highlighting, tree highlighting, tree grate design, and parking meters. A spreadsheet has been developed to incorporate all of the pricing and produce an overall estimate of probable cost. The lighting layout has progressed to include a first pass at integration of parking meters with the light poles.

# Status (2004):

Design scope has been finalized based upon costs. The two blocks of State Street between Front Street and Third Street have been split from the remainder of the project and the Department of Transportation has approved a One Million Dollar project request under the Home Town Streets Project.

# Status (2005):

Design of CBD Streetscape is complete and awaiting funding, and the project has been divided into phases. Phase I consists of the 100 and 200 blocks of State Street. Funds were identified from a State source and the federally funded Transportation Enhancement Program through PENNDOT. Phase I was

advertised and awarded. Construction will be completed during the upcoming construction season.

Status (2006)

Construction of the 100 and 200 Blocks of State Street was completed in October of 2006. Staff has completed design of the remaining phases and is awaiting construction funding.

Status (2007)

Construction of the "State Street Promenade" project was completed during the year at a cost of \$2,260,363.94.

# • 1994 Infrastructure Renewal

Collect existing measurements, construction materials and pavement conditions of City streets for Pavement Evaluation Program.

Status (1998):

Much of the desired information has been collected and is available. This office and others assisted the City Planning Bureau with funding to upgrade the GIS software.

Status (2001)

The City GIS system was significantly improved during the 2001 calendar year with the approval of a line item in the budget in the amount of \$72,000 for GIS Upgrade and System Management by the engineering consulting firm of Skelly & Loy. The existing GIS system was transferred into a more powerful software package to allow more efficient update of various maps and databases. The acquisition of new software has improved accessibility to the system and increased the scope of the City's GIS capabilities. As a result, a GIS website has been created to allow City staff to view, print, and query GIS maps and several important applications for GIS information have been developed. The approved City budget for 2002 includes a line item in the amount of \$100,000 to continue the efforts with Skelly & Loy.

As a pilot program, to demonstrate the functionality of the new software, this office planned and initiated the development of a street-cut management program within the GIS system. The creation of the street-cut system allowed staff to track each street-cut application electronically through the use of a street-cut map and an interactive database. The street-cut system can be accessed via the internet, laptop computer, or the LAN network in the City Government Center. This program not only allowed staff to track information, but also to have the ability to easily search past permits and generate reports and mailing lists. Much of the "data clean-up" required to create the street-cut management system has laid the groundwork to develop additional computer applications for GIS information. It is anticipated that in 2002 the street-cut program will be expanded to allow applications to be received and paid via the internet.

In conjunction with the purchase of the streetlight system, GIS mapping and databases have been developed to inventory and locate the 5400+ light fixtures now owned and maintained by the City. GIS maps of the streetlight system are used to assist in dispatching for routine and emergency maintenance and to keep maintenance records for each streetlight fixture. In 2002 this system will be further developed to allow for electronic invoicing for maintenance efforts and automatic updates of maintenance records as work is completed.

In addition to funds from the City budget, this office has received and continues to pursue grant money to further the enhancement of the GIS system. In 2001, PA/DEP awarded a grant of \$180,120 to the City to perform a watershed analysis of the Paxton Creek, which included \$32,400 to enter related data onto the GIS. The City is utilizing these funds to update and improve the GIS maps and databases of the sewer system. FEMA awarded a grant of \$60,000 (\$30,000 in 2002 and \$30,000 in 2003) to create new digital flood plain maps for the Paxton Creek, with all data to be entered on the GIS. In 2002 a Dauphin County economic development grant in the amount of \$12,500 will be presented to the City and Steelton Borough to explore the possibility of exchanging, filing, and recording deeds electronically. It is anticipated that deeds could be received

electronically from the Recorder of Deeds and routinely added to the City GIS database.

# Status (2002):

With a budget of \$100,000 for 2002, the Office of the City Engineer was able to continue the enhancement of the City's Geographic Information System. This effort was accomplished through an extension of the contract with Skelly & Loy and with a GIS intern, funded by DEP.

The most notable accomplishment of 2002 was the completion of the streetlight maintenance tracking system. This system allows the City to track maintenance activities of subcontractors and automatically populates the GIS database with a maintenance history of each light serviced. This online application gives the City the ability to generate reports on maintenance activities, query the database to identify problem areas in the lighting network, and plan periodic mass re-lamping activities. This functionality allows the City to target maintenance in areas that haven't been serviced recently and avoid replacing newer equipment during mass re-lamping.

Through the use of an intern, funded through a DEP Growing Greener Grant, the entire sewer data layer has been updated and reconstructed. The new GIS layer for the sewer network contains depth and grade information for almost all sewers in the City. This extensive database is being utilized by the Harrisburg Authority as a basis for developing a hydraulic model of the interceptor sewer system.

In 2002 the Office of the City Engineer continued to make improvements to the on-line street cut permit management system. Currently UGI and the Water Bureau are utilizing the online permit system. NRG Energy, Verizon and PPL began utilizing the system in spring 2003. Negotiations are currently underway between the City Webmaster, the Treasury Department and the Commonwealth of Pennsylvania to give the City the ability to accept payments online.

Other significant development on the GIS includes enhancements and updates to the traffic control, centerline, right-of-way, and parcel data layers. This office has also been coordinating with Dauphin County to determine the feasibility of implementing an electronic deed filing system.

Status (2003)

The City, working together with Steelton Borough, received an economic development grant from the Dauphin County Office of Economic Development to explore the possibilities of establishing the real property records on line using the GIS database and software. The City's consultant worked to gather details and coordinated meetings with the Dauphin County Recorder of Deeds and the Tax Assessor's Office to explore the possibility of coordination and cooperation.

During this year, the street cut program was made available to utility companies and private contractors entirely on line.

Status (2004):

City budget contained \$50,000 to extend the contract with Skelly & Loy to continue to enhance the GIS programs. The streetlight maintenance program was made available on line for both the City and the maintenance contractor. The Official City Traffic Map was updated with traffic control signs and traffic signal information. This map is approximately 75% complete because not all information on street signs is available on the system.

Status (2005):

City budget contained \$50,000 to extend the contract with Skelly & Loy to continue to enhance the GIS programs. Parcel information was added to the database and the County Registrar of Deeds has installed a software program to update property transfers electronically. The City now updates its records via electronic access to the County system.

Status (2006):

Engineering Staff continues to add utility data to GIS. The position of Registrar of Real Estate was modified to include GIS data update. The new employee works with the staff Civil Engineer to coordinate all updates. Property information has been added to GIS as well. It now contains property lines, identification, owner, deed reference, address and water meter information.

Status (2007):

The position of GIS Manager was requested as part of the 2008 Annual budget, but was removed in a cost cutting action by City Council.

Status (2008):

No progress was made during the current year because the Civil Engineer position remained vacant due to a City-wide freeze on management positions.

# • 1997 Sewer Replacement

The goal is to establish a formal program for replacement/reconstruction of City sewer lines.

Status (1999):

This Office began the task of identifying the segments of existing brick sewer that pose a significant possibility of collapse. Funding sources, program estimates and phasing of replacement projects will be presented with budget requests.

# • 1997 Stormwater Management

To gather sufficient data concerning stormwater management problems to assess the situation and recommend a program and funding source.

Status (1998):

Preliminary information was provided to consultant who has been engaged by The Harrisburg Authority to set up a stormwater utility.

An analysis of Paxton Creek was completed with a matching grant from EPA through CEDA COG to determine whether improvements could be made to the

structures at Wildwood Lake to minimize downstream flooding during summer thunderstorms. The analysis pointed out a silt deposit at the confluence of Asylum Run that causes a surcharge in the vicinity of Maclay Street at the Farm Show Complex. There is also a negative slope in the stream bed near the Asylum Run confluence that further compounds the situation with backups and flooding. A funding source is being sought to correct the problems.

# Status (1999)

Under a PADEP "Growing Greener" program, the City submitted a request for a grant to analyze the entire Paxton Creek watershed. Storm related problem areas will be identified and solutions will be designed and funded if the grant request is approved and sufficient funds are made available to the City.

# Status (2001)

DEP selected the City's second submission for a grant to perform an analysis of the Paxton Creek and awarded a grant in the amount of \$183,120. The City in turn entered into a contract with the environmental consulting firm of Skelly & Loy to perform the analysis.

# Status (2001)

Storm water management-The Paxton Creek Watershed Analysis was initiated by Skelly & Loy after complying with DEP regulations. Field reconnaissance was completed and data collection and verification was started. This office hired a GIS Technician with a portion of the grant funds whose duties and responsibilities are to input the stream data into the computer database.

An additional grant request was submitted based on the initial data gathered. The request is for funds to modify the feeder streambed entrance to Wildwood Lake to direct the initial storm flows from the outfall to the portion of the stream that flows through the City and often causes flash flooding.

A second grant application is for funding to repair portions of the stream bank in the upper reaches of the watershed where significant erosion occurs. Decisions on the two applications will be made in mid-2002.

# Status (2002)

Through funding from the PA/DEP "Growing Greener" program, the City has completed a watershed assessment for the Paxton Creek. This study identified various storm water related problems in Harrisburg and upstream portions of the watershed and made recommendations for specific restoration projects. The City and Skelly & Loy presented a summary of the watershed assessment results to Lower Paxton Township, Susquehanna Township, DEP, Dauphin County Parks & Recreation and PCWEA. Copies of the completed study were distributed to presentation attendees.

PA/DEP awarded a second grant to the City to design a stream bank restoration project on a portion of Paxton Creek known as Black Run. The purpose of this project is to stabilize a section of stream bank in Paxton Creek and help reduce sediment deposits in Wildwood Lake. The Office of the City Engineer has also submitted an application in the 2004 round of "Growing Greener" funding for a restoration project in the Bellevue Park area.

In summer 2002, work began on the FEMA floodplain-mapping project. The purpose of this project is to create a hydrologic model digitally recreate the 50-year and 100-year FIRM floodplain boundaries. Funding for this project is provided through a \$60,000 grant from FEMA.

# Status (2003)

Design of the Black Run restoration and stabilization project was completed during the year and PA/DEP concurred that the City should request approval of a grant to fund the restoration project.

# Status (2004)

The City applied for a Growing Greener Grant for the installation of the proposed work on Black Run.

New storm water management regulations took effect this year concerning the

methods of handling storm water. The City is affected by these rules and is taking steps to comply.

# Status (2004)

The City has met all requirements of the new storm water management rules and submitted the first annual report to PA/DEP.

# Status (2005)

PA/DEP awarded grants to the City to construct the stream improvement designed earlier for Black Run. DEP also awarded grants to design and implement modifications to the "Morning Glory" outlet in Wildwood Lake and to design a project to redirect the Paxton Creek entrance into Wildwood Lake.

# Status (2006)

The DEP Growing Greener Grant for outlet modification in Wildwood Lake was less than requested. The City requested balance of funds from Dauphin County Growing Greener Grant. The County Commissioners approved the request. Staff is awaiting distribution of funds.

DEP advised that they are again accepting requests for watershed grants. The City and its consultant is preparing a request to construct a series of flood control structures on a tributary to Paxton Creek to aid in flood mitigation in the vicinity of the Farm Show Complex and Maclay Street.

# Status (2007)

A contract was awarded to the consulting firm of Skelly & Loy to design modification to the outlet in Wildwood Lake and to award construction contract(s) using the State and County Growing Greener Grant Funds.

A project request to design and install a series of holding ponds along the reaches of Asylum Run, a tributary of Paxton Creek as a further sediment control measure was submitted to Pennsylvania Department of Environmental Protection for funding through the Growing Greener Grant program.

Status (2008)

The project was not selected for funding by DEP during the year, but remains in valid contention in calendar year 2009.

# **Projects**

# Capitol Heights-Infrastructure Replacement

Status (1999)

The City awarded a contract to Jay Fulkroad & Sons for \$1,950,957 to replace sewer, water, sidewalks, curbs and streets for the Capitol Heights Housing Development Project. All work is to be completed by mid-2000, so the housing development company can begin construction. The project covers the area bounded by N. Third Street to N. Fourth Street and Hamilton Street to Kelker Street. Plans and specifications were prepared by Brinjac-Kambic and Associates, Inc.

Status (2000)

The project was completed in December of 2000 and turned over to the City's housing development contractor. The total construction and design cost is \$2,418,591.00.

Status (2003)

The project continues through 2004, but a major change in philosophy in 2003 allowed the City to turn funding over to the housing development contractor to replace and install the appropriate infrastructure for future phases of the project. This office continues to coordinate with the housing development office to instruct the contractor which utilities and other infrastructure must be replaced or installed.

Status (2004)

Infrastructure upgrades continued through this past year as new housing units were constructed in the project.

Status (2005)

Infrastructure upgrades continued through this past year as new housing units were constructed in the project.

# Status (2006)

The Housing Developer, Streuver Rouse, continues to construct housing in the Capitol Heights area. Although they have changed site development contractors several times, the replacement of utilities, installation of streetlights and reconstruction of roads and sidewalks continues.

# HARRISBURG AREA TRANSPORTATION STUDY GROUP (HATS) APPROVED PROJECTS:

• The Extension of South Third Street, renamed Southern Gateway, to the south to form a connection with the I-83 entrance/exit ramps and to interconnect with South Second Street and South Front Street was added to the TIP. Environmental Analysis, Preliminary Design and Final Engineering were funded in the amount of \$4,057,500 in the FFY's of 2001, 2003 & 2004.

The engineering Consulting firm of Trans Associates, located in Enola, PA, was selected to perform the design of the project. When completed, this project will redefine the transportation system and enhance opportunities for economic development in the south end of the Central Business District.

# Status (2002)

During the winter of 2002 the economic evaluation of the City of Harrisburg was completed and report submitted. The objective of the study was to determine future demand and absorption for office space in Harrisburg with a particular focus on class A product for the Central Business District. To assess the demand for office space, the competitive market area was defined, and relevant supply and demand characteristics were examined. A brief review of the competitive hotel market was also conducted to assess, on a preliminary basis,

future demand for additional facilities. This information was then utilized in the development of a travel demand-forecasting model.

During the Spring and Summer of 2002 the Southern Gateway Project data collection program was completed. This included completion of turn movement counts at 37 downtown intersections, pedestrian counts at 12 intersections in the core of downtown, and travel time runs along the major corridors. Once completed, existing condition analyses were performed and a draft existing conditions report prepared.

Once the data collection program and the economic evaluation were completed, development of the travel demand-forecasting model began. This included geocoding of the origin and destination information gathered in 2001.

As part of the Southern Gateway Project's on-going community involvement program, a planning workshop was held on Thursday, September 12, 2002 at the Harrisburg Hilton. The intent of the workshop was to gain a better understanding of the community's vision for the study area, which extends from I-83 at the southern end of the city north to Chestnut Street and from the Susquehanna River east to Norfolk Southern/AMTRAK rail lines. The information obtained from this workshop, plus information gleaned earlier from focus group discussions, formed the basis for the goals and objectives report that was drafted late in 2002.

# Status (2003)

Preliminary engineering continued throughout 2004 and public meetings were held as part of the environmental analysis process to solicit public comments and to inform the general public about the project. Three alternative routes were developed and presented to the Department of Transportation and the Federal Highway Administration for review and comment. There appears to be wide acceptance of the project following the public meetings. The general attitude is that the traveling public must have more than one route into and out of the City from the Interstate Highway.

Status (2004)

The Department of Transportation continues to support the Southern Gateway Project and considers this project an adjunct to the Department's I-83 Master Plan for improvements along that corridor.

# Status (2005)

The consultant team completed and submitted the Environmental Analysis to PENNDOT and Federal Highway Administration following a public comment period. Attention was then directed to the economic development opportunities in the project area. Approval was given to begin final design.

# Status (2006)

Design slowed on the transportation network to redirect attention to acquiring additional funds to perform land use planning and utility design necessary to support the proposed new development made possible by the extension of the transportation network. The team has identified State, Federal and private funds for this planning and design effort.

# Status (2007)

Work slowed considerably on the transportation aspects of the project while awaiting approval of the latest addendum to the design/reimbursement agreements to add transportation funds. The team identified economic development to the project and concentrated on obtaining commitments for that aspect of the project.

• The **Widening of Seventh Street** between Reily Street and Maclay Street was also approved and added to the funded area of the TIP in the amount of \$800,000 in FFY's 2001 & 2004, plus an additional \$3,129,000 in the 2005 TIP for construction.

The engineering consulting firm of Buchart-Horn of York, PA was selected to design the project. This four-lane entrance to the City from the north is intended to entice commuters to access the Central Business District along that route rather than use the Front Street-Second Street one-way corridors. The reduction in traffic volume will allow two-way traffic along Second Street and perhaps Front Street.

# Status (2002)

Notice to Proceed was issued April 1, 2002. Field survey, traffic analysis, environmental testing, and environmental documentation are now completed. Preliminary bridge rehab plans, lighting plans, construction plans and right-of-way plans were completed and submitted to PennDOT for review.

Dauphin County Commissioners provided the 20% local match. A check for \$700,000 was received from the County for this purpose. The fourth project added to the TIP using a combination of State Bridge Funds, Federal Funds and Local Funds is the replacement of the ramp and repair of parapet walls and lighting on the Mulberry Street Bridge.
 Design was funded at \$181,466.12. The engineering consulting firm of Pennoni Associates, Inc. of Camp Hill, PA was selected to design the project.

# Status (2002)

The consultant completed preliminary engineering to the point of submission of the Type, Size & Location submission. PENNDOT Safety Review Committee accepted the consultant's design solution and authorized the City to proceed to final design subject to identification of additional funding. The final design solution requires an expenditure of approximately \$1,300,000, but there is only \$600,000 approved for construction in the TIP.

# Status (2003)

Environmental Analysis and preliminary engineering was completed during the year and submitted to the Department of Transportation and Federal Highway Administration for approval.

# Status (2004)

PENNDOT approved Final Engineering and Right-Of-Way Acquisition.

# Status (2005)

Agreements were finalized and Notice To Proceed issued to consultant team to contact property owners in the project area to enter negotiations to purchase required Right Of Way.

Status (2006)

The design consultant initiated final roadway design, streetlight design and traffic signal design. Additionally, the real estate sub-consultants made property appraisals and began the right-of-way acquisition process.

Status (2007)

The City's consultant team began the acquisition of propriety for the right-of-way and worked to prepare plans and specs for construction.

Status (2008)

Project design was finalized and acquisition of property for expanded right-of-way was continued.

• The Replacement of Twenty-three Existing Traffic Signals was approved by HATS in 2002. The \$520,000 needed for design was included on the FFY 2003 TIP and \$2,489,000 of the construction funding is listed in FFY 2004 through 2006. The design and construction of these signal replacements is 100% federally funded. The twenty-three (23) signal replacements will be designed and constructed in five (5) separate corridors as follows:

# **Maclay Street Corridor**

Maclay & Front

Maclay & Second

Maclay & Third

Maclay & Fourth

Maclay & Sixth

# Sixth Street Corridor

Sixth & Division

Sixth & Schuylkill

Sixth & Reily

Sixth & Verbeke

Reily & Third

# Market Street Corridor

Market & Seventeenth

Market & Nineteenth

Market & Hale

Twenty-fifth & Rudy Road

# Seventeenth Street Corridor

Seventeenth & Brookwood

Seventeenth & Berryhill

Seventeenth & Walnut

Seventeenth & Herr

Seventeenth & SR 0022

Herr & Twentieth

# Thirteenth Street Corridor

Thirteenth & Berryhill

Thirteenth & Walnut

Thirteenth & Market

Due to high numbers of signal related accidents, the Maclay Street and Market Street signal corridors will be constructed in FFY 2004 and 2005. Replacement of the Sixth Street, Seventeenth Street, and Thirteenth Streets signals will follow respectively in FFY 2006 and 2007.

# Status (2003)

The City Traffic Signal Corridors project was awarded to a consulting engineering firm for design and preliminary engineering and environmental analysis were initiated. All corridors are listed on the Harrisburg Transportation Improvement Program (TIP) with full construction funding.

# Status (2004)

PENNDOT approved Preliminary Engineering for all corridors and authorized final design and construction for both Maclay Street & Market Street Corridors

# Status (2005)

Installation contracts were awarded for both Maclay and Market Street Corridors. Both projects are scheduled to be completed during 2006. The 6<sup>th</sup> Street, 13<sup>th</sup> Street and 17<sup>th</sup> Street Corridors were combined into a single installation contract scheduled to be awarded during 2006 and completed during 2007.

Status (2006):

Both Market Street and Maclay Street signal corridors were completed during 2006 and all signals were placed into service. At Market and 21<sup>st</sup> Street, a new signal was installed to this previously unsignalized intersection. Design was completed on the 6<sup>th</sup>, 13<sup>th</sup> and 17<sup>th</sup> Street corridors and the three corridors were placed into a single construction project that was advertised and awarded. Installation of the new signals is under way.

Status (2007)

The final construction project was completed and all signals were put into service. Final cost for design and construction of all three phases of the project was \$4,099,986.

• The City submitted several candidate projects to the Department for listing on the 2005 TIP, but only one was selected. The selected project approves the removal of a railroad bridge that is no longer used by the rail freight system over the intersection of Paxton and Cameron Streets. Following removal of the bridge, the intersection will be improved to aid in the free-flow of traffic. Funding for design and construction is authorized in 2006 and 2007.

Status (2005)

PENNDOT entered negotiations with a design consultant to prepare the necessary plans and specs for the intersection improvement.

Status (2006)

The PENNDOT consultant performed a traffic analysis and started a layout analysis of the intersection and turn lanes.

Status (2007)

PENNDOT's Consultant continued design and identified properties to be acquired for construction of the expanded intersection.

Status (2008)

All intersections were completed and put into service.

# 2006 New Projects Funded Through FHWA

- The City received funding through the Federal Highway Administration Enhancement Program to replace the lighting on the Market Street Bridge across the Susquehanna River. The design "mimicked" the original large lantern style fixtures on each bridge pier that were removed in the 1960's. Thirty-six fixtures were fabricated and installed on the east spans of the bridge between the City and City Island. "Teardrop" style fixtures were installed on the west spans. The concrete arches that form the spans on the east channel were lighted from beneath and the large cast iron fixtures in the plaza on Front Street were restored. The city paid for design of the lighting system and FHWA funded the construction under the auspice of PENNDOT. The project was completed in November 2004, but had not been noted in this report.
- Special Federal Funding was provided in the 2006 Transportation Program (SAFETEA-LU) to replace lighting on both the State Street Bridge and the Mulberry Street Bridge.
   The City notified PENNDOT that it will begin design on the State Street project during 2007 and is awaiting concurrence from the Department.
  - 2007-A design contract was awarded to Brinjac Engineers, Inc. (the City's Outdoor Lighting consultant) to perform the design for replacement lighting on the State Street Bridge.
  - 2008- Design was completed and approved for advertising.
- PENNDOT is performing a renovation project on the Mulberry Street Bridge and will use the congressional funding to replace the lighting. Their consultant will coordinate the design with the City to ensure the City agrees with the style of fixtures to be installed.

Status (2007)

Little progress was made on this project. It is scheduled for construction in 2010.

Status (2008)

PennDOT awarded a work order to its design contractor to add design of the streetlight system to the project.

# **PROJECT LISTING**

Attached are status reports of projects that were in progress or completed during 2008.

# REQUESTS FOR CHANGES TO TRAFFIC CONTROL SYSTEM

The staff routinely performs engineering studies in response to requests from citizens for changes to the traffic control system such as installation of stop signs, change of one-way streets and so on. Attached is a listing of the studies performed and changes made during 2008.

Status (2008)

Additional Traffic Control was approved during 2008 as listed in the attached table.

# EXPENDITURE ANALYSIS DETAIL 2008 BUDGET

General	Fund

0107 City Engineer's Office

Alloca	tion Plan		Position Control						
PERSONNEL SERV	ICES		JOB CLASSIFICATION	2008 BUDGET	ALLOCATION				
Salaries-Mgmt Salaries-BU Fringe Benefits	119,457 80,958 70,944		City Engineer Civil Engineer	1	83,025 36,432				
TOTAL	70,744	271,359	Total Management	2	119,457				
			Engineer's Rep. III Reg. of Real Estate III	1 1	43,523 37,435				
OPERATING EXPE	NSES		Total Bargaining Unit	2	80,958				
Communications Professional Svs. Utilities Insurance Rentals Maint & Rep. Contracted Services Supplies	2,950 0 0 0 0 335,100 805 3,515		FICA Healthcare Benefits-A Healthcare Benefits-R		15,420 49,154 6,370				
TOTAL CAPITAL OUTLAY		342,370 674,311	Total Fringe Benefits	·	70,944				
Grants (Matching Sha TOTAL APPROPRIA	<u> </u>	465,725 1,753,765	TOTAL		<u>271,359</u>				

# **City of Harrisburg**

Office of The City Engineer Monthly Report - 2008

Project Name	Source-Contract Amount	Completion Scheduled	Status	% Complete	Remarks:
Southern Gateway	F/G \$2,886,000	2012	Design	80%	On Hold For Private Committment
Seventh Street Widening	F \$757,222	2010	Design	99%	
CBD Streetscape	S \$721,800		Design	99%	On Hold For Funding
Black Run	D \$174,625	2009	Installation		Additional Monitoring Required Per DEP Permit
Streetlight Maintenance Contract-7 <sup>th</sup> of 10 Yrs.	G \$179,701		In Progress	60%	
Paving	PIB \$2,400,000	2008	Construction	99%	Awaiting Final Billing
Wildwood Lake Improvements	D \$109,700	2009	Design	40%	
Asylum Run	D \$25,000	2009	Design	90%	

Note: C-Community and Block Development Grant

F-FHWA Grant (80% Cost) G-City General Fund S-Special Fund "COPS" D-DEP Grant

PIB-Pennsylvania Infrastructure Bank

# City of Harrisburg

Office of the City Engineer
Monthly Report - 2008
Completed Project, Status Report

PROJECT	STATUS
6 <sup>th,</sup> 13 <sup>th</sup> , 17 <sup>th</sup> , Street Corridor	Complete
Traffic Signals Corridors Project	Complete

City of Harrisburg
Office of the City Engineer
Monthly Report - 2008
Traffic Studies, Status Report

PROJECT LOCATION	ACTION REQUESTED	STATUS
Monroe Street (Downey School)	One Way	School District Hired Transportation Consultant To Perform Study and Make Recommendations
Bellevue Park (Chestnut and Pentwater St., 21 <sup>st</sup> and Hillside)	Stop Signs Request	In Progress
1400-1500 Randolph Street	Speed Humps	In Progress

# City of Harrisburg Office of the City Engineer

Monthly Report – 2008 Completed Traffic Studies Report

PROJECT LOCATION	ACTION REQUESTED	STATUS
Karper Street (between Benton & Berryhill)	No Parking Signs and One Way	Completed
1200 Block of S. 13 <sup>th</sup> Street	Loading Zone	Denied
Derry Street (@ Mulberry)	Loading Zone	Denied
Park & Chestnut Streets	Stop Sign	Denied
1334 Howard Street	No Parking Sign	Denied
2030 Greenwood Street	Loading Zone Request	Completed
1800 Block Chestnut Street	No Parking Signs	Denied

**City of Harrisburg** Office of the City Engineer Monthly Report-2007-2008

		City Light Maintenance Rep	ort	
Month	Total Calls	PA One Calls	Maintenance Calls	Major Repairs
January 08	270	161	98	11
February 08	133	69	59	5
March 08	154	83	58	13
April 08	229	155	67	7
May 08	200	143	38	19
June 08	252	178	72	2
July 08	244	144	92	8
August 08	181	118	55	8
September 08	226	140	77	9
October 08	194	110	76	8
November 08	15	12	2	1
December 08	105	81	20	4
Totals	2,203	1,394	714	95

City of Harrisburg
Office of The City Engineer Monthly Report - 2008

PROJECT/PLAN REVIEWS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTALS
# of Reviews	4	6	3	6	4	1	4	4	3	5	2	3	45

STREET CUT PERMITS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTALS
City Permits Issued	63	55	45	29	37	64	30	23	23	38	25	19	451
PADOT Highway Permits Issued	0	2	2	1	2	0	0	1	2	2	1	1	14
# of Street Cut Inspections	38	18	43	18	89	14	12	47	47	47	68	68	509
Manhole Inspections	0	1	1	1	0	0	1	0	2	2	0	0	8
Inlet Inspections	0	0	0	0	0	1	0	0	2	2	0	0	5
Sidewalk/Curb Inspections	0	0	0	0	0	0	0	0	0	0	0	0	0
Sinkhole Inspections	0	0	0	0	0	0	1	1	1	2	0	1	6

RECORDER OF DEEDS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTALS
Research for Operations &	0	2	0	5	2	0	0	3	1	1	0	0	14
Revenue Bureau													
Research for Miscellaneous	2	2	0	0	1	0	0	0	7	0	0	0	12
Accounts													
# of City Deeds	187	138	159	5	155	288	200	163	146	164	156	147	1908
Received/Recorded													
# of Township	22	16	11	20	18	22	15	20	18	17	11	12	202
Deeds													